

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/JP2004/010976

**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 C23C18/31 C23C18/28

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 C23C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, INSPEC

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P, X	WO 2004/033754 A (TOYOTA JIDOSHA KABUSHIKI KAISHA; HIRAOKA, MOTOKI; BESSHO, TAKESHI; SIB) 22 April 2004 (2004-04-22) claims 1-8; pages 16-17;	1-5
X	ANONYMOUS: "Polyimide surface modification by ozonolysis" RESEARCH DISCLOSURE, KENNETH MASON PUBLICATIONS, HAMPSHIRE, GB, vol. 339, no. 37, July 1992 (1992-07), XP007117898 ISSN: 0374-4353 the whole document ----- -/--	1,2,4,5

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

### \* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the International filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*G\* document member of the same patent family

Date of the actual completion of the international search

24 February 2005

Date of mailing of the international search report

04/03/2005

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Ramos Flores, C

## INTERNATIONAL SEARCH REPORT

Inte      nat Application No  
PCT/JP2004/010976

C/(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 485 699 A (INTERNATIONAL BUSINESS MACHINES CORPORATION) 20 May 1992 (1992-05-20) claims, col. 8, line 45 to col. 10, line 45 -----	1,2,4,5
X	US 5 803 131 A (IWASA ET AL) 8 September 1998 (1998-09-08) claims, col. 8, line 58 to col. 10, line 27 -----	1-5
A	PATENT ABSTRACTS OF JAPAN vol. 013, no. 302 (C-616), 12 July 1989 (1989-07-12) & JP 01 092377 A (NIPPON OZON KK), 11 April 1989 (1989-04-11) abstract -----	1-5
X	WO 02/088422 A (TOYOTA JIDOSHA KABUSHIKI KAISHA; NAKANISHI, MASATSUGU; BESSHO, TAKESHI) 7 November 2002 (2002-11-07) the whole document -----	1-5
P,X	EP 1 380 671 A (TOYOTA JIDOSHA KABUSHIKI KAISHA) 14 January 2004 (2004-01-14) the whole document -----	1-5

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No  
PCT/JP2004/010976

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 2004033754	A	22-04-2004	JP 2004131807 A WO 2004033754 A2	30-04-2004 22-04-2004
EP 0485699	A	20-05-1992	US 5318803 A EP 0485699 A2 JP 2711951 B2 JP 4232278 A	07-06-1994 20-05-1992 10-02-1998 20-08-1992
US 5803131	A	08-09-1998	JP 3031177 B2 JP 8092752 A JP 8091063 A JP 8269723 A	10-04-2000 09-04-1996 09-04-1996 15-10-1996
JP 01092377	A	11-04-1989	NONE	
WO 02088422	A	07-11-2002	JP 2002309377 A BR 0208938 A EP 1380671 A1 WO 02088422 A1 MX PA03009267 A US 2004115353 A1	23-10-2002 20-04-2004 14-01-2004 07-11-2002 26-03-2004 17-06-2004
EP 1380671	A	14-01-2004	JP 2002309377 A BR 0208938 A EP 1380671 A1 MX PA03009267 A US 2004115353 A1 WO 02088422 A1	23-10-2002 20-04-2004 14-01-2004 26-03-2004 17-06-2004 07-11-2002